

Figure 1

Role of *HWP1* in health of mice orally colonized with *C. albicans*.

Mouse type	Health	Number of mice given <i>C. albicans</i> strains of <i>HWP1</i> type			
		I. <u>HWP1 HETEROZY GOTE</u>	hwp1/hwp1* homozygote	II. <u>HWP1 REVERTANT</u>	Wild type
Beige nude	ill	5	2	3	3
	not ill	2	9	1	1
	total	7	11	4	4
*P < 0.05 compared to the heterozygote, P = .058 compared to the revertant. P < .05 compared to combined heterozygote and revertant groups. Survival differences between other groups were not significant.					
Epsilon 26	ill	5	0	4	5
	Not ill	0	5	1	0
	total	5	5	5	5
*P < .01 compared to individually to the heterozygote and revertant groups. Survival differences between other groups were not significant.					

Figure 2

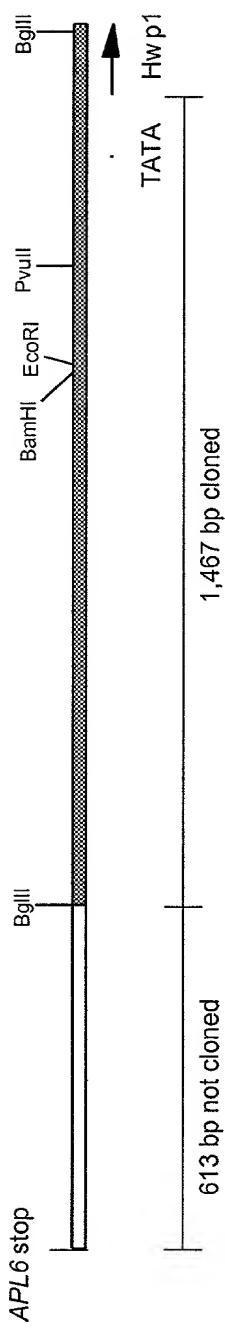


Figure 3

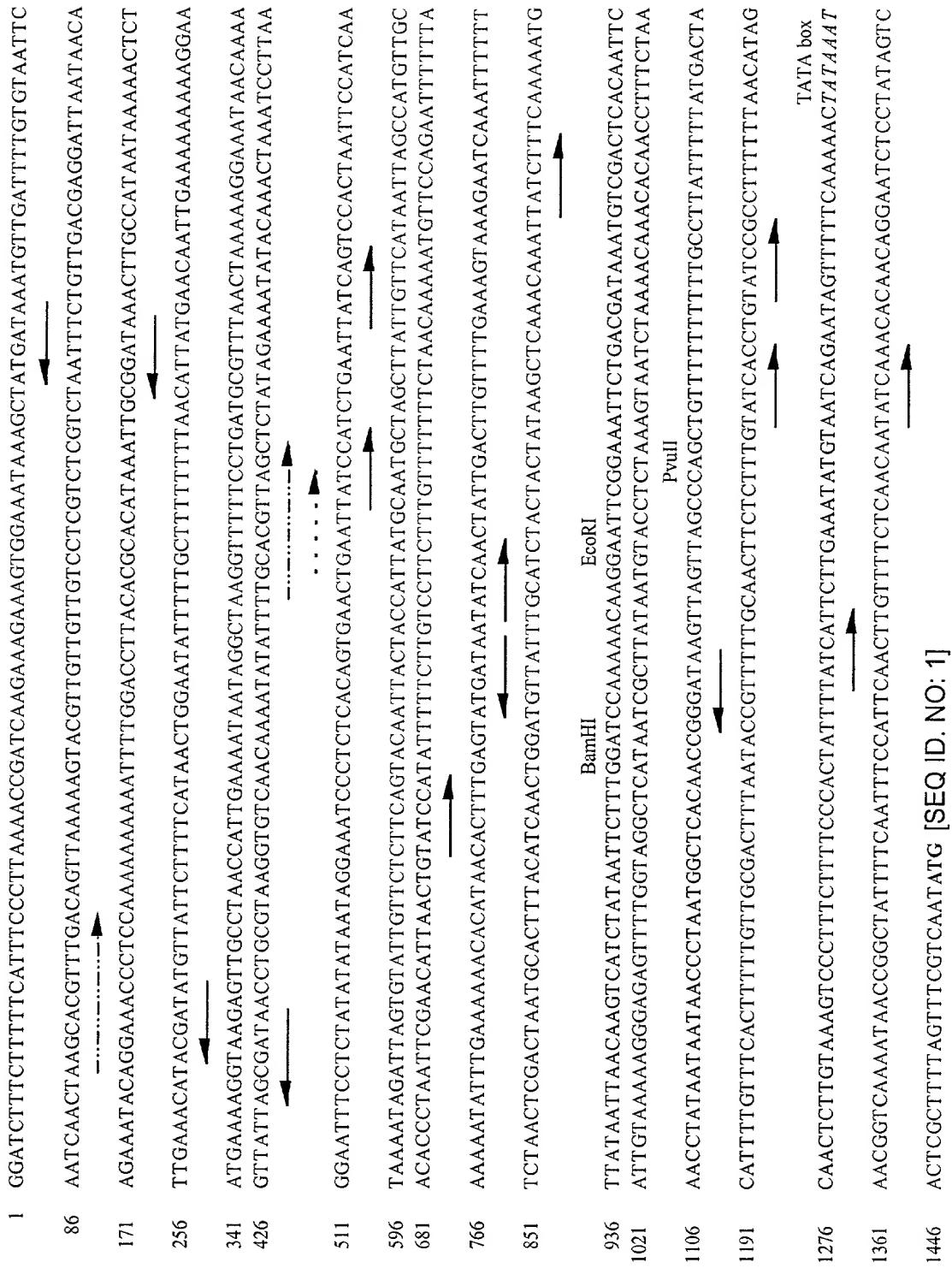


Figure 4

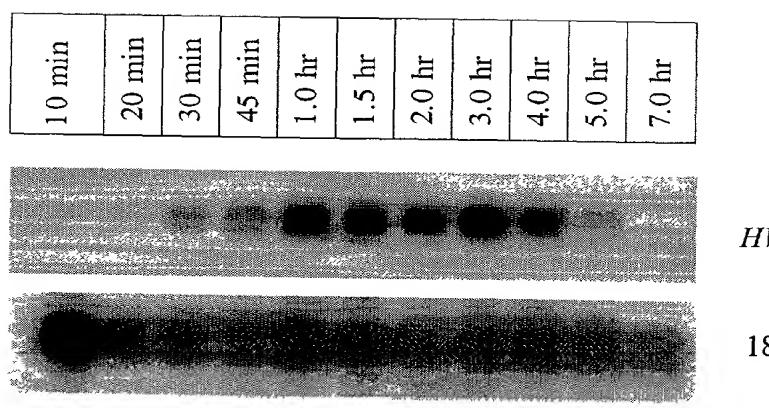
009241-0327690

* * * ♦ * *
GAT99 CTNCGTKTTPLWRRNPQGQPLCNACGLFLKLHGVVRPLSLKTDVIKKRQR [SEQ ID. NO: 2]
::: :::::::::::::::::::::
NIT2 CTNCFTQTPPLWRRNPDGQPLCNACGLFLKLHGVVRPLSLKTDVIKKRNR [SEQ ID. NO: 3]

Figure 5

TAATTCTAATAACTGATACTAAGITTTGTCCTTTGGGATTCTTTTTCTAATTT
GATTGTTTTCAATTGGGTTTCAATATTGACAAGAGTCATTGAAATTGATATTGT
TTTGTACTACATTAAGGTGATAGGTACTTTAGTTAAAATTGTTGTTCAAATT
GTTTATCTTTCTTCTACTTGCTTGTTCAGTGTAGCTT
TTAATAAATACCCCTTTTACAATAGTTAGTCTAAGCTTATTCACTGGTTAATTGG
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AGTCATTATTCTGGACGCATGAAGGTCAAAGTCAAAAAGTGAGAATATGCAAAGAGGT
AATTAGATTCTGTCTATTAAACAAAAAT**TATATATA**AGACTGCAATATTAAAC
CCCCCAAGTTGATTCTATAATCCTCGATTCTATAAAGATATAACCATGAATCATGAGT
AAATACCAAATAGATTAAATAGTAGAATCTGATGGCGTGTAAAGCTGTTATTAAAAC
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CCATACTTAACAATTATTGTTATTACGTACTTCACAGGGAAAGAAAAAGTTAAGATTIA
AATCTCTTATTCCCTTCTTCTTTATTATTATTACCTTAATATAAAT**GTCAAAACAAGA**
TCCACCTCCAGATTATAACAAATAGGACATCAGATAATTATAACCCAGATACA
ACTGATAATCA
TAATATTCCACCTTCACTACTCATCCTATAGAGGTTCATCCACCACTCTCCTTC
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TTAGAAAGATATGTCCTACTAATTACATCCATTGATATTGATAAGATTATTATGATTATT
GTATTGTTAAACGGAAATTACACGTTGGATATGATAGTTATATTGAATTACTCCTGATC
GAGAATTCGGATCC [SEQ ID. NO: 4]

Figure 6



HWP1

18S

Figure 7

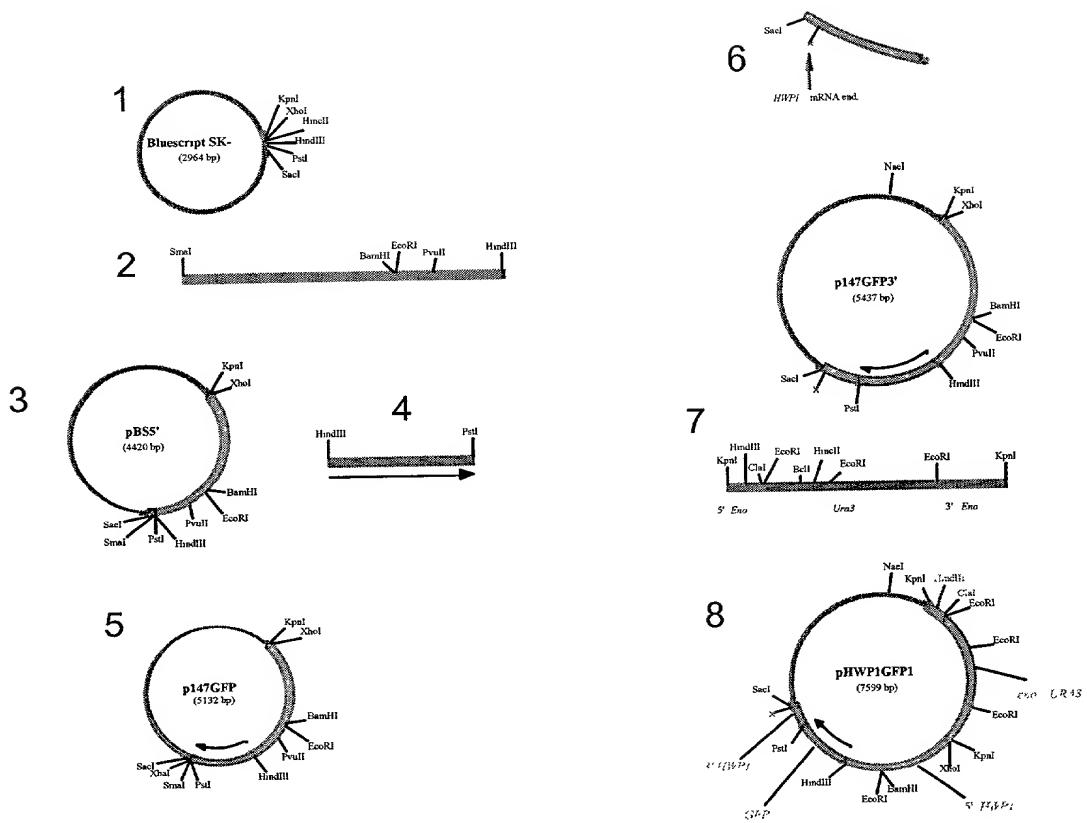


Figure 8

Integration of pHWP1GFP1 into the chromosome of *C. albicans* at the enolase locus.

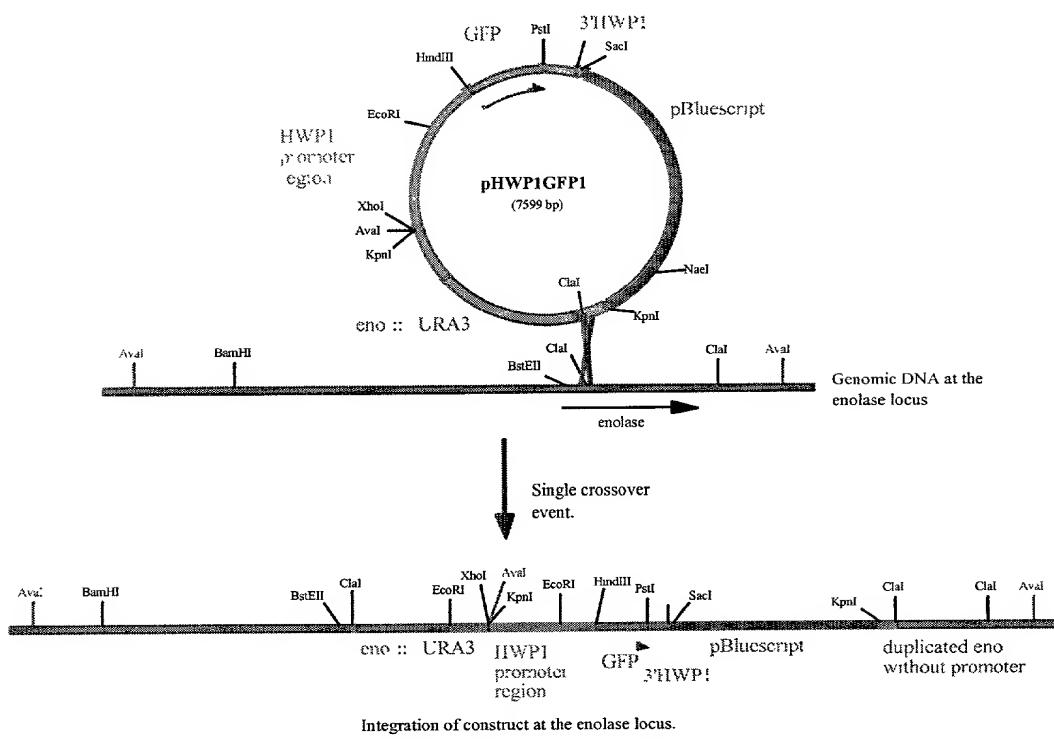


Figure 9

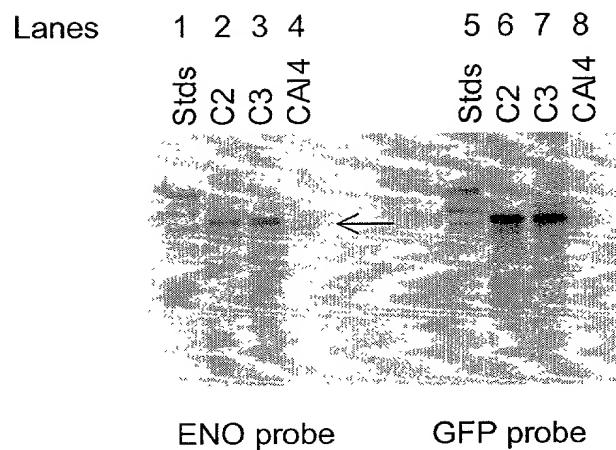


Figure 10

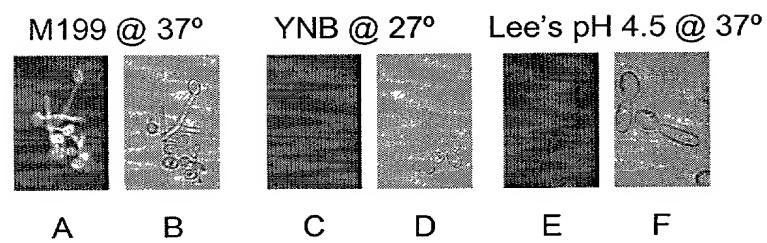
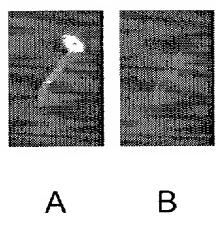


Figure 11



A B

Figure 12

DDG2AP™ DTD222260

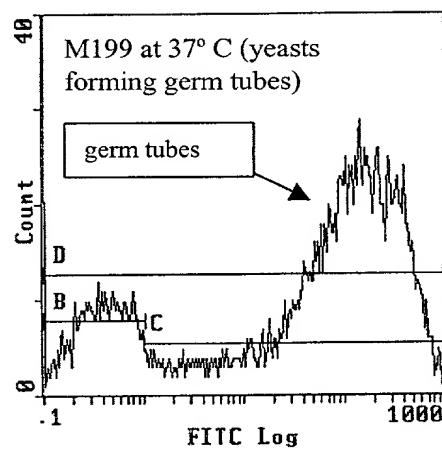
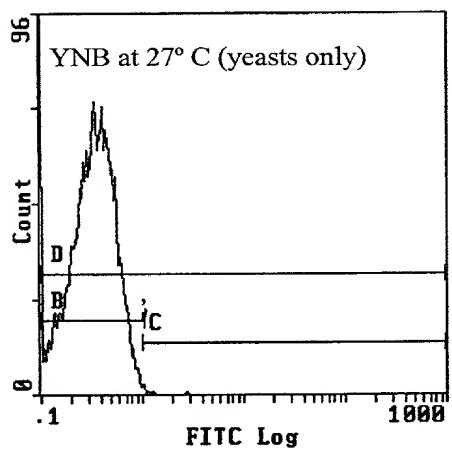


Figure 13A

Figure 13B

GGCTCGAG GGA CCT TAC ACG CAC ATA ACC TGC Δ205 bp

5' GG **CTCGAG** CAA AAG TTA TTA GCG ATA ACC TGC Δ421 bp (SEQ ID. NO: 6)
(SEQ ID. NO: 5)

5' GG **CTCGAG** CCT TAC ATT Δ608 bp (SEQ ID. NO: 7)

5' GG **CTCGAG** CTC GAC TAA TCG ACT TTA CAT CAA Δ856 bp (SEQ ID. NO: 8)

5' GG **CTCGAG** ATG TCG ACT CAC AAT TCA TTG Δ1004 bp (SEQ ID. NO: 9)

5' GG **CTCGAG** GTT GCG ACT TTA ATA CCG TT Δ1209 bp (SEQ ID. NO: 10)

5' GG **CTCGAG** CAT AGC AAC TCT TGT AAA GTC Δ1271 bp (SEQ ID. NO: 11)

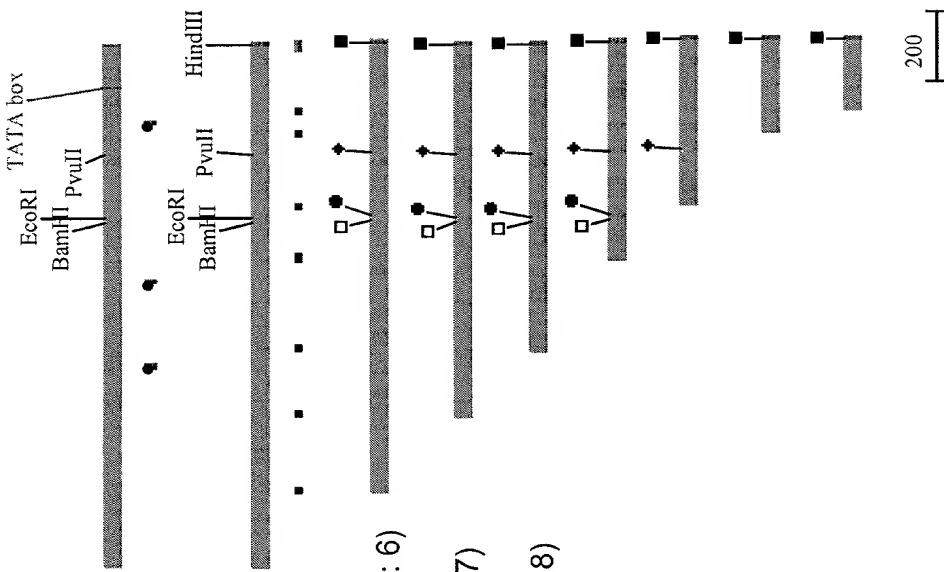


Figure 14A

Figure 14B

Identification of virulence and morphogenesis factors in *C. albicans*

I. STEP 1: CREATE A GENOMIC LIBRARY FOR MICROARRAY CONSTRUCTION

Prepare *C. albicans* genomic DNA.



Sau 3A partial digest.



Size selection of 0.5 to 2.0 kb fragments.

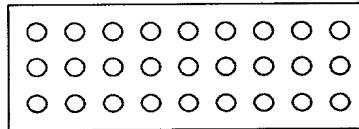


Clone genomic fragments into plasmid vector (pBluescript).



A. STEP 2: Create Microarray

Transfer transformants to 96-well plates.



Perform colony PCR using universal primers.



Check PCR rxns on gels and rearray positives on 96-well



Spot productive rxns on membranes.



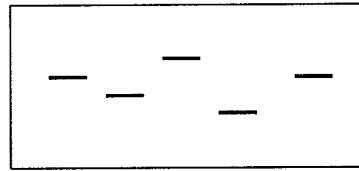
Prepare and label cDNA from mRNA of strains with and without DNABPG



Hybridize labeled cDNA to duplicate membranes.



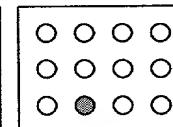
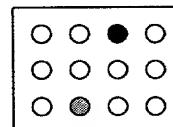
Go back to 96-well plates and sequence the clones of interest.



Labeled cDNA from strain;
with DNABPG dnabpg null mutant



wild type mutant



Labeled cDNA.

→ **In vivo analysis of genes.**

Figure 15